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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/727,291

12/03/2003

Brian C. Morris

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EXAMINER

WILLIAMS, JEFFERY L

ART UNIT

PAPER NUMBER

2437

NOTIFICATION DATE

DELIVERY MODE

01/14/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

apatentlawyer@hotmail.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/727,291	<b>Applicant(s)</b> MORRIS ET AL.	
	<b>Examiner</b> JEFFERY WILLIAMS	<b>Art Unit</b> 2437	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

Claims 1 – 23 are pending.

This action is in response to the communication filed on 10/14/08.

All objections and rejections not set forth below have been withdrawn.

***Specification***

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

The specification fails to provide proper antecedent basis for the recitations of “a second concurrent SSL connection”, “direct connection”, “indirect connection”, “said concurrent SSL connections”, “wherein said concurrent SLL connections are direct connection between said client and said server”, “wherein said concurrent SLL connections are indirect connection between said client and said server”, “wherein said concurrent SLL connections are one of direct and indirect connection between said client and said server”, and “wherein said concurrent SLL connections are one of direct and indirect connection between said client and said server”.

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***Claim Objections***

Claims 20 – 23 are objected to because of the following informalities: SSL is misspelled as “SLL”. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

**The following is a quotation of the first paragraph of 35 U.S.C. 112:**

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

**Claims 1 – 23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.** The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant has not pointed out where the new (or amended) claim is supported, nor does there appear to be a written description of the claim limitations in the application as filed (see above objection to the specification).

**The following is a quotation of the second paragraph of 35 U.S.C. 112:**

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claims 1 – 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Regarding claims 1, 10, and 11, the term “concurrent” is a relative term which renders the claim indefinite. The term "concurrent" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. In the instant case, the recitation “concurrent SSL connection” is used without provision of a reference to that with which it is coincident, thereby rendering the scope of the claims ambiguous.

Furthermore, the recitation of “a second concurrent SSL connection” is ambiguous as the applicant fails to recite “a first concurrent SSL connection”.

Regarding claims 2 and 19, there is insufficient antecedent basis for the recitation of “said second SSL connection”. For the purpose of examination, the examiner presumes the applicant to recite "said second concurrent SSL connection".

Regarding claims 20 – 23, there is insufficient antecedent basis for the recitation of “wherein said concurrent SLL connections”. For the purpose of examination, the examiner presumes the applicant to recite "wherein concurrent SSL connections".

Regarding claims 20 – 23, the recitations “direct connection” and “indirect connection” lack any standard meaning to one of ordinary skill in the art. Furthermore, the applicant’s disclosure fails to provide definitions for the terms recited. Thus, the scope of claims 20 - 23 is rendered indeterminate.

All depending claims are rejected by virtue of dependency.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1 – 8, 10 – 18, and 20 – 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aziz et al. (Aziz), “Method and Apparatus for Providing Secure Communication with a Relay in a Network”, U.S. Patent 6,643,701 in view of Gast, “System and Method for Accelerating Cryptographically Secured Transactions”, U.S. Patent Publication 2003/0046532.**

Regarding claim 1, Aziz discloses a system for establishing first (fig. 3:310) and second SSL connections (fig. 3:330) between a client and a web server. The system comprises:

1           a web server computer having SSL protocol server software operably associated  
2           therewith for enabling a SSL connection, wherein SSL protocol server software includes  
3           a CA certificate and private key (fig. 3:340; 6:21-24; 5:6,7),  
4           and a client computer communicatively linked to said web server computer  
5           having web browser software having SSL protocol client software operably associated  
6           therewith for enabling an a first SSL connection between said client computer and said  
7           web server computer (fig. 3:300, 310; 6:18-21),

8           Aziz discloses client and server software operably associated with the client  
9           computer and the web server computer (fig. 3:320; 6:4-26, 38-40 – herein, Aziz show's  
10          software code for communicating with a client [i.e. “client software”] and software code  
11          for communicating with a server [i.e. “server software”]). Aziz does not appear to  
12          explicitly recite that such software is “SSL acceleration software”. However, Gast  
13          explicitly recites that client and server software can be for the purpose of acceleration  
14          (Abstract, fig. 2:200). It would have been obvious to one of ordinary skill in the art to  
15          recognize the benefits of acceleration as disclosed by Gast within the system of Aziz.  
16          This would have been obvious because one of ordinary skill in the art would have been  
17          motivated by the advantages of speed and efficiency.

18          The combination enables:

19          SSL acceleration server software *operably associated with said web server*  
20          *computer which includes a pseudo CA certificate (Aziz, 5:11) and access to said private*  
21          *key and a public key (Aziz, fig. 3:320; 5:6-13; Gast, fig. 2:202,214, 206, 212) and SSL*  
22          *acceleration client software operably associated with said client computer (Aziz, fig.*

1 3:320; 5:6-13; Gast, fig. 2:202,214, 206, 212) *which communicates with said SSL*  
2 *acceleration server software to receive a copy of said pseudo CA certificate and said*  
3 *public key and present said pseudo CA certificate to said web browser software for*  
4 *validation thereof (Aziz, 5:6-13) for enabling a second SSL concurrent connection*  
5 *(Aziz, fig. 3:300) between said client computer and said web server computer in a*  
6 *manner which permits optimization techniques to be applied on data transmitted*  
7 *through said second concurrent SSL connection (Gast, fig. 2:202, 214, 206, 212).*  
8

9 Regarding claim 2, the combination enables:

10 *wherein said SSL acceleration client software is further equipped for monitoring*  
11 *when said web browser requests a SSL connection with said web server computer and*  
12 *intercepting said SSL request from said web browser, and diverting communication*  
13 *through one of an established and an initiated SSL connection through said SSL*  
14 *acceleration client software and SSL acceleration server software (Aziz, 4:49-65; 7:54-*  
15 *8:5).*  
16

17 Regarding claim 3, the combination enables:

18 *wherein said SSL acceleration client software is equipped to initiate a SSL*  
19 *request to said SSL acceleration server software operably disposed with web server*  
20 *computer to establish a SSL connection (Aziz, 4:49-65; 7:54-8:5; Gast, fig. 2:202, 206,*  
21 *212).*  
22



1           Regarding claim 4, the combination enables:

2           *wherein SSL acceleration server software is further equipped for monitoring*  
3           *when the web server computer receives a request for a SSL connection through said*  
4           *SSL acceleration client software where upon such request initiates a SSL handshake*  
5           *wherein said pseudo CA certificate is sent to said client computer via SSL acceleration*  
6           *client software with a public key (Aziz, 5:1-22).*

7  
8           Regarding claim 5, the combination enables:

9           *wherein said web browser software is equipped to send a list of available*  
10          *encryption algorithms to said web server computer and said SSL acceleration client*  
11          *software intercepts said list, selects an encryption algorithm from said list (Aziz, 1:33-63;*  
12          *Gast, par. 24-26).*

13  
14          Regarding claim 6, the combination enables:

15          *wherein said SSL acceleration client software is equipped to send said chosen*  
16          *encryption algorithm to said browser software (Gast, par. 24 – herein the combination*  
17          *discloses that the data is relayed from one end system to the other).*

18  
19          Regarding claim 7, the combination enables:

20          *wherein said browser software is equipped to create a secret key, encrypt using*  
21          *said chosen encryption algorithm and using said public key and send said encrypted*

1 *secret key to said server computer through said SSL acceleration client software/SSL*  
2 *acceleration server software (Aziz, 2:1-36).*

3  
4       Regarding claim 8, the combination enables:

5       wherein said SSL acceleration server software is equipped to de-encrypt said  
6 secret key using said private key (Aziz, 2:1-36; 5:1-22).

7  
8       Regarding claims 20 – 23, as best understood, the combination enables:

9       *"wherein said concurrent SLL connections are direct connection between said*  
10 *client and said server", "wherein said concurrent SLL connections are indirect*  
11 *connection between said client and said server", "wherein said concurrent SLL*  
12 *connections are one of direct and indirect connection between said client and said*  
13 *server", and "wherein said concurrent SLL connections are one of direct and indirect*  
14 *connection between said client and said server"* (Aziz, fig. 3:310 and 3:330 – first and  
15 second connections).

16  
17       Regarding claims 10 – 18, they comprise essentially similar limitations to the  
18 rejected claims above, and they are rejected, at least, for the same reasons.

19  
20       **Claims 9 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable**  
21 **over the combination of Aziz and Gast in view of Freed et al. (Freed), "Secure**  
22 **Sockets Layer Proxy Architecture", U.S. Patent Publication 2003/0014628.**

1  
2       Regarding claims 9 and 19, the combination recites software for transforming  
3       SSL data transmissions, but does not appear to explicitly recite compression. Freed,  
4       however, teaches that SSL data transmissions are transformed by compression (Freed,  
5       par. 10, 52). It would have been obvious to one of ordinary skill in the art to employ  
6       compression within the SSL data transmission of the combination of Aziz and Gast.  
7       This would have been obvious because one of ordinary skill in the art would have been  
8       motivated by the teachings of the prior art regarding the nature of SSL transmissions.

9  
10  
11                               ***Response to Arguments***

12  
13       Applicant's arguments filed 10/14/08 have been fully considered but they are not  
14       persuasive.

15  
16       In response to the applicant's arguments, the examiner notes that they are  
17       substantially similar to previous arguments by the applicant and that the examiner finds  
18       them unpersuasive for reasons of record. Furthermore, the examiner notes that:

19       Essentially, the Applicant argues or asserts:

20  
21       (i)     *In the most recent Office Action, the Examiner relies on Aziz, FIG. 3 as teaching*  
22       *multiple SSL connections between the same client and server. Applicants have taken*

1 *note of Examiner's comments and amended the application accordingly. In reading*  
2 *Aziz, Aziz provides for a session resumption procedure for handling a break in an*  
3 *existing SSL communication link. Aziz points this out as seen in Column 8, lines 42-65,*  
4 *which states:...*

5 *Accordingly, Aziz does not teach, disclose or suggest Applicants' claimed*  
6 *invention which provides for concurrent secure connections between the same server*  
7 *and client. (Remarks, pg. 7, 8)*

8  
9 In response, the examiner respectfully notes that Aziz does teach "first" and  
10 "second" SSL connections. This was pointed out within the rejection: "*Aziz discloses a*  
11 *system for establishing first (fig. 3:310) and second SSL connections (fig. 3:330)*  
12 *between a client and a web server*". Furthermore, the examiner notes that these  
13 connections are clearly "concurrent", as they enable communications to occur between  
14 the client and server.

15  
16 (ii) *It is clear that Aziz only discloses making a single connection between each*  
17 *client and a relay and a relay and a server at any one given time. Moreover, Aziz states*  
18 *that the connection can be a cleartext HTTP connection. (Remarks, pg. 8)*

19  
20 In response, the examiner respectfully notes that the applicant appears mistaken.  
21 The prior art clearly shows two connections (Aziz, Fig. 3:310, 330). Furthermore, the

1 prior art clearly discloses that the connection can be a secure connection (e.g. Aziz,  
2 5:34-41).

3  
4  
5 (iii) The point stressed in Gast is to offload the establishment of SSL connections by  
6 the server, not to establish additional concurrent SSL connections between the client  
7 and server as opposed to the instant invention which provides a CA certificate and a  
8 pseudo CA certificate to establish concurrent SSL connections through whereby data  
9 can pass in a compressed form, for example, in the second established connection.  
10 Gast teaches away from the instant invention. (Remarks, pg. 9)

11  
12 In response, the examiner respectfully notes that the applicant's remarks  
13 comprise only allegation, and are not supported by rational or evidence. The examiner  
14 respectfully notes that such remarks are unpersuasive. Applicant's arguments fail to  
15 comply with 37 CFR 1.111(b) because they amount to a general allegation that the  
16 claims define a patentable invention without specifically pointing out how the language  
17 of the claims patentably distinguishes them from the references.

18  
19 (iv) *In view of the above amendments and remarks, this is also traversed. Freed et*  
20 *al. discloses a secure sockets layer architecture which employs an intermediate device*  
21 *between the client computer and the server computer which intercepts SSL/TCP data*

1 *and then performs one or more transactions to aid in acceleration. Like Aziz, there is no*  
2 *direct link between the client computer and the server computer. (Remarks, pg. 10)*

3  
4 In response, the examiner respectfully notes that the applicant's arguments do  
5 not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable  
6 novelty which he or she thinks the claims present in view of the state of the art disclosed  
7 by the references cited or the objections made. Further, they do not show how the  
8 amendments (i.e. "direct link") avoid such references or objections.

9  
10 ***Conclusion***

11  
12 The prior art made of record and not relied upon is considered pertinent to  
13 applicant's disclosure:

14 **See Notice of References Cited.**

15  
16 Applicant's amendment necessitated the new ground(s) of rejection presented in  
17 this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP  
18 § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37  
19 CFR 1.136(a).

20 A shortened statutory period for reply to this final action is set to expire THREE  
21 MONTHS from the mailing date of this action. In the event a first reply is filed within  
22 TWO MONTHS of the mailing date of this final action and the advisory action is not

1 mailed until after the end of the THREE-MONTH shortened statutory period, then the  
2 shortened statutory period will expire on the date the advisory action is mailed, and any  
3 extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of  
4 the advisory action. In no event, however, will the statutory period for reply expire later  
5 than SIX MONTHS from the date of this final action.

6 Any inquiry concerning this communication or earlier communications from the  
7 examiner should be directed to Jeffery Williams whose telephone number is (571) 272-  
8 7965. The examiner can normally be reached on 8:30-5:00.

9 If attempts to reach the examiner by telephone are unsuccessful, the examiner's  
10 supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone  
11 number for the organization where this application or proceeding is assigned is (703)  
12 872-9306.

13 Information regarding the status of an application may be obtained from the  
14 Patent Application Information Retrieval (PAIR) system. Status information for  
15 published applications may be obtained from either Private PAIR or Public PAIR.  
16 Status information for unpublished applications is available through Private PAIR only.  
17 For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should  
18 you have questions on access to the Private PAIR system, contact the Electronic  
19 Business Center (EBC) at 866-217-9197 (toll-free).

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21  
22 J. Williams  
23 AU 2437  
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2 Supervisory Patent Examiner, Art Unit 2437  
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